Appl. No.

09/993,874

Filed

November 14, 2001

AMENDMENTS TO THE CLAIMS

1 (currently amended): An isolated nucleic acid molecule encoding a green light emitting luciferase which hybridizes under high stringency conditions to a nucleotide sequence selected from the group consisting of:

- a) SEQ ID NO:1; and
- b) the complement of SEQ ID NO:1,

wherein said high stringency conditions correspond to washing in prewarmed (68°C) solution containing 0.1xSSC/0.1% SDS for 15 min at 68°C,

wherein the encoded green light emitting luciferase emits green bioluminescence having a maximum λ of approximately 549 nm when expressed in E coli.

- 2 (canceled)
- 3 (withdrawn): An isolated nucleic acid molecule encoding a red light emitting luciferase which hybridizes under high stringency conditions to a nucleotide sequence selected from the group consisting of:
 - (a) SEQ ID NO.3, and
 - (b) the complement of SEQ ID No.3,

wherein said high stringency conditions correspond to washing in prewarmed (68°C) solution containing 0.1xSSC/0.1%SDS for 15 min at 68°C,

wherein the encoded red light emitting luciferase emits red bioluminescence having a maxim λ of approximately 622 nm when expressed in E coli.

- 4 (canceled)
- 5 (canceled)
- 6 (canceled)
- 7 (currently amended): A vector comprising the isolated nucleic acid molecule as defined in Claim 1-or-6.
- 8 (previously presented): A recombinant host cell comprising the vector as defined in Claim 7.
- 9 (withdrawn): The isolated nucleic acid molecule as defined in Claim 3 wherein the nucleic acid molecule has at least 90% identity.
- 10 (canceled)
- 11 (canceled)

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AMENDMENTS TO THE DRAWINGS

Figure 1 has been amended to contain the sequence of SEQ ID NO: 1.